GRANT APPLICATION MANUAL

SCPBRG-PIEREA Avian-Energy Systems Mitigation Program

Solicitation issued by: U.C. Santa Cruz Predatory Bird Research Group

Funded by: California Energy Commission Public Interest Energy Research Program



CONTENTS

| RI | FP ANN | NOUNCEMENT | ii |
|----|--------|---|----|
| GI | RANT A | APPLICATION MANUAL INTRODUCTION | 1 |
| | | AVIAN-ENERGY SYSTEMS MITIGATION GRANT PROGRAM PTION | |
| | 1.1 | Overview of PIER Program | 2 |
| | 1.2 | Eligible Applicants | 2 |
| | 1.3 | Eligible Research | 3 |
| | 1.4 | Research Restrictions | 5 |
| | 1.5 | Cost-Sharing | 6 |
| 2. | SELE | CCTION PROCESS AND EVALUATION CRITERIA | |
| | 2.1 | Selection Process Time-Line | 7 |
| | 2.2 | Initial Screening | 8 |
| | | 2.2.1 Completeness | 8 |
| | | 2.2.2 Eligibility | 8 |
| | | 2.2.3 Feasibility | 8 |
| | 2.3 | Technical Review Process and Criteria | 8 |
| | | 2.3.1 Technical Review Scoring | 9 |
| | | 2.3.2 Technical Review Criteria | 9 |
| | | 2.3.3 Final Review & Approval | 11 |
| | 2.4 | Rejected Proposals | 12 |
| | 2.5 | Modifications | 12 |
| 3. | GRAN | NT APPLICATION INSTRUCTIONS | |
| | 3.1 | General Instructions | 12 |
| | 3.2 | Formatting Requirements | 13 |
| | 3.3 | Content of Grant Application Package | 13 |
| | 3.4 | Submission | 16 |
| | 3.5 | Grant Application Cover Page | 17 |
| | 3.6 | Budget Form | |
| | | 3.6.1 Budget Preparation Instructions | 19 |
| 4. | GRAN | NT AWARD AGREEMENT | |
| | 4.1 | Grant Performance | 21 |
| | 4.2 | Reimbursement of Invoices | 21 |
| | 4.3 | Deliverables | 21 |
| Ap | pendix | x A: Sample Agreement | |

SCPBRG- PIEREA Avian-Energy Systems Mitigation Program

Announcement: Request For Proposals

Starting date: 05/24/04 Closing date: 07/24/04

On behalf of the California Energy Commission's (CEC) Public Interest Energy Research Environmental Area (PIEREA), the University of California, Santa Cruz Predatory Bird Research Group (SCPBRG) is requesting proposals in accordance with the goals of the PIEREA Avian–Energy System Mitigation Program. Funding is available for research projects that address the development and application of methods and technologies for reducing avian/bat fatalities caused by electrocution and collisions with power structures.

The overall goals of the Public Interest Energy Research (PIER) regarding this program as defined in California State Interagency Agreement 500-01-032, as amended are:

- ❖ Improve the energy cost/value of California's electricity by reducing costs associated with negative avian/bat interactions with utility structures such as power outages, delayed developments, and ineffective retrofitting.
- ❖ Improve the environmental cost/risk of California's electricity production by providing effective tools and solutions to reduce avian/bat fatalities related to interactions with utility structures, such as retrofitting transmission systems and wind turbines with birdand bat-friendly designs and treatments, and by supporting trends to re-power wind turbine developments in a manner that reduces bird/bat fatalities.
- ❖ Improve the reliability, quality, and sufficiency of California's electricity by reducing the number of avian-caused power outages.
- ❖ Provide greater choices for California consumers by helping to resolve the issue of bird wind turbine collisions, in hopes of lifting the current moratorium on the increase of wind generating capacity at some California wind farms, and by supporting the future development of wind energy production in a manner that is not in violation of state and federal laws.

Research Categories

- * Risk Assessment Research: develop and implement methodologies and tools to assess and locate high electrocution and collision risk energy-related system structures and to determine the extent of negative avian/bat interactions in California.
- Risk Reduction Research: develop and implement standards, guidelines, tools and procedures to reduce the extent of negative avian/bat interactions with energy-related systems.
- Compliance Monitoring: develop and implement procedures, guidelines, and standards to audit mitigation efforts' effectiveness at adequately reducing negative avian/bat interactions with energy-related systems.
- ❖ Technology Transfer: develop media needed by agencies, researchers, and industry to access and share information intended to promote and improve bird-safe practices in regard to transmission system upgrade, maintenance, and design.

Approximately \$1,000,000 will be awarded in response to proposals. Review of projects will begin 07/26/04 and end 10/01/04. Awards will be announced by 10/04/04. Interested researchers may direct their technical and contracting questions to walton@ucsc.edu

Address for electronic submission (PREFERRED): walton@ucsc.edu

Address for hardcopy submission (original plus 6 copies):*

Attn: Brian James Walton/CEC Santa Cruz Predatory Bird Research Group Long Marine Lab University of California Santa Cruz, CA. 95060

Applicant Notification List

We recommend that all individuals or organizations that intend to submit a proposal to the current solicitation register their email address with SCPBRG to ensure notification of any late changes to the application process. To register, send an email to walton@ucsc.edu with the words "CEC Applicant" in the subject line and request your email to be added to the "Applicant Notification List". Contact information will only be retained for the current solicitation.

*For hardcopy submission, postmark must be *five working days* prior to submission deadline date.

Avian-Energy Systems Mitigation Program

GRANT APPLICATION MANUAL INTRODUCTION

On behalf of the California Energy Commission's (CEC) Public Interest Energy Research Environmental Area (PIEREA), the University of California, Santa Cruz Predatory Bird Research Group (SCPBRG) is awarding grants in accordance with the goals of the PIEREA Avian–Energy System Mitigation Program.

This manual provides the information needed to establish applicant eligibility and to complete the application package. In addition, the manual describes key program features related to proposal evaluation and approval.

- **Section 1** general features of the PIER Program and the PIEREA Avian Energy Systems Mitigation Grant Program, including applicant eligibility and research topics.
- **Section 2** information regarding the proposal evaluation and award processes.
- **Section 3** proposal preparation instructions and application forms.
- **Section 4** notice of awards, performance, invoicing, and minimum deliverables.

Appendix A Sample Agreement

1. PIER AVIAN-ENERGY SYSTEMS MITIGATION GRANT PROGRAM DESCRIPTION

1.1 Overview of PIER Programs

The 1996 California Assembly Bill (AB) 1890 (California Statutes, Chapter 854) added Section 381 to the Public Utilities Code, requiring funds to be collected annually from investor-owned electric utility ratepayers for public interest energy research, development and demonstration (RD&D). Of these funds, the Energy Commission administers \$61.8 million per year through the PIER Program.

The Commission's RD&D Strategic Plan identifies the overall mission of the PIER program as follows:

To conduct public interest energy research that seeks to improve the quality of life for California's citizens by providing environmentally sound, safe, reliable and affordable energy services and products. "Public interest energy research" includes the full range of research, development and demonstration activities that will advance science or technology not adequately provided by competitive and regulated markets.

One of the six subject areas the PIER Program is implemented through is the Environmental Area. The goal of the PIER-EA is:

To develop cost-effective approaches to evaluating and resolving environmental effects of energy production, delivery, and use in California, and explore how new electricity applications and products can solve environmental problems.

The specific purpose of the Avian-Energy Systems Mitigation Program administered by the PIER-EA is:

To conduct research that supports the development and application of methods and technologies for reducing and resolving negative impacts from avian interactions with California's electrical generation and transmission/distribution system.

The program's explicit objective is:

To fill important RD&D gaps by addressing research needs as identified in three PIEREA Roadmaps (Section 1.3)

1.2 Eligible Applicants

Participation in the Avian-Energy Systems Mitigation Program is open to: individuals; small and large businesses; non-profit organizations; academic institutions; local, state, and federal agencies; and graduate students.

- ❖ Individuals: Must be acting independently. If employed or affiliated with an organization, applicant must have authorization from the organization to pursue project development exclusively as an individual with no rights reserved to the organization. NOTE: Applicants who are employed by a college/university or affiliated laboratory are not eligible to apply as individuals; submission for such employees must be made through the applicant's home institution.
- ❖ Small and large businesses: The PIEREA Exploratory Grant Program uses the Federal definition of small as specified in Title 13, Code of Federal Regulations, Part 121 (13 CFR § 121), Small Business Size Regulations (http://www.sba.gov/regulations/siccodes/). Size requirement varies based on type of business with the average requirement being either prior year gross receipts of less than \$5 million or total employees not exceeding 500
- ❖ Non-profit organizations: Possess IRS tax exemption.
- **Academic institutions:** Public or private post-secondary institutions.
- ❖ Local, State, and Federal governmental organizations: Local, State, and Federal agencies, Federal laboratories or other Federally Funded Research and Development Centers who are not otherwise prohibited from directly responding to a public RFP.
- **Graduate Student:** Proof of status required.

1.3 Eligible Research

Proposals under this solicitation must address the specific purpose of the Avian-Energy Systems Mitigation Program stated above, meet **at least** one of the following PIER goals regarding this program as defined in California State Interagency Agreement 500-01-032 as amended, fit into one of the following four research categories, and meet one of the research needs outlined by PIEREA roadmaps as described below.

PIER GOALS:

- ❖ Improve the energy cost/value of California's electricity by reducing costs associated with negative avian/bat interactions with utility structures such as power outages, delayed developments, and ineffective retrofitting.
- ❖ Improve the environmental cost/risk of California's electricity production by providing effective tools and solutions to reduce avian/bat fatalities related to interactions with utility structures, such as retrofitting transmission systems and wind turbines with birdand bat-friendly designs and treatments, and by supporting trends to re-power wind turbine developments in a manner that reduces bird/bat fatalities.
- ❖ Improve the reliability, quality, and sufficiency of California's electricity by reducing the number of avian-caused power outages.
- ❖ Provide greater choices for California consumers by helping to resolve the issue of bird wind turbine collisions, in hopes of lifting the current moratorium on the increase of wind

generating capacity at some California wind farms, and by supporting the future development of wind energy production in a manner that is not in violation of state and federal laws.

RESEARCH CATEGORIES:

- * Risk Assessment Research: develop and implement methodologies and tools to assess and locate high electrocution and collision risk energy-related system structures and to determine the extent of negative avian/bat interactions in California.
- Risk Reduction Research: develop and implement standards, guidelines, tools and procedures to reduce the extent of negative avian/bat interactions with energy-related systems.
- Compliance Monitoring: develop and implement procedures, guidelines, and standards to audit mitigation efforts' effectiveness at adequately reducing negative avian/bat interactions with energy-related systems.
- ❖ Technology Transfer: develop media needed by agencies, researchers, and industry to access and share information intended to promote and improve bird- and bat-safe practices in regard to transmission system upgrade, maintenance, and design.

RESEARCH NEEDS:

Complete roadmaps are available electronically at: http://www.energy.ca.gov/reports/reports_500.html#500

From A roadmap for PIER Research on Avian Collision with Power Lines in California.

Research needs to focus on expanding our knowledge of the problem, identifying and refining avoidance and mitigation measures, and developing new detection technologies.

- 1. Standardize Mortality Estimation
- 2. Test and Document Diversion Device Efficacy
- 3. Test and Document Remote Collision Detection Devices
- 4. Determine Collision Risk Levels Associated with Potential High-Avian-Use Habitats
- 5. Determine Factors Necessary to Develop a Statewide Reporting and Monitoring Network

From A Roadmap for PIER Research on Avian Power Line Electrocution in California.

The research needs are designed to fit a hierarchical and adaptive research model which resolves risk assessment, risk reduction, compliance monitoring, and technology transfer. Mid- and long term goals are intended to build on research results from short-term programs and provide a foundation for ultimately achieving risk reduction and providing research tools and information necessary to monitor electrocution impacts.

- 1. Risk Reduction Research and Development
- 2. Standardized Monitoring Protocol
- 3. Determine Factors Necessary to Develop a Statewide Reporting and Monitoring Network.

From A Roadmap for PIER Research on Avian Interactions with Wind Turbines in California.

Research should be concentrate on completing the analysis needed to understand what factors contribute to risk, developing methods to reduce those risks, and monitoring to determine the effectiveness of those measures.

- 1. Update Wind Turbine Effects Bibliography
- 2. Risk Assessment of Larger Turbine Repowering Studies
- 3. Risk Assessment for Burrowing Owls at Altamont Pass
- 4. Develop Methodology to Evaluate Collision Risk to Bats
- 5. Develop Economical and Scientifically Sound Pre- and Post-Construction Survey Protocols Regarding Bird/Bat Risks
- 6. Test and Document Visual Diversion Treatments
- 7. Field Test and Refine Risk Assessment Model
- 8. Evaluate Habitat Modification Techniques to Reduce Collision
- 9. Determine Avian Use at Potential Future Wind Resource Areas in California

1.4 Research Restrictions

In order to avoid duplication, the following projects are restricted from awards from the SCPBRG-PIEREA Avian-Energy Systems Mitigation Program.

- Guide to Raptor Remains--- Field guide to the identification of California Raptor and Corvid carcasses and remains.
- ❖ Bird Electrocution Mitigation Web Site and Product Encyclopedia--- Website cataloging currently available products that are designed to minimize avian electrocutions and wire strikes.
- ❖ Corona Testing--- Tests bird flight diverters and power line markers for corona discharge that can cause audio noise and radio interference resulting in customer complaints.
- Evaluating and Reducing Avian Collisions at Consumnes River Preserve--- Assesses powerline collision risk and evaluates the effectiveness of powerline marking devices at The Nature Conservancy's Staten Island Preserve: a high water-bird use area that experiences dense fog during winter months.
- * Raptor Electrocution on Power Lines: Problem Assessment, Mitigation, and Monitoring--Measures raptor mortality, identifies sources of estimate bias, identifies high risk landscape attributes and pole designs, assesses the effectiveness of standardized monitoring methods and retrofitting procedures.

- * Revising and Updating "Suggested Practices for Raptor Protection on Powerlines: The State of the Art in 1996" --- makes current the aforementioned document.
- Bird Fatality Associations and Predictive Models for the Altamont Pass Wind Resource Area.
- ❖ Monitoring Raptor Facilities and Validating a Preliminary Model for Predicting Electrocutions on SCE and PG&E Distribution Facilities--- Monitors electrocutions in high raptor use areas, identifies and estimates detection bias, assesses retrofit effectiveness and collects detailed information on pole characteristics and environmental settings in an attempt to develop a predictive model of that would allow utilities to prioritize the retrofitting of higher risk structures.

1.5 Cost-sharing

There are no matching funds or repayment requirements associated with the PIER Grant Program. However, cost-sharing is encouraged and is a weighted consideration in the evaluation process. A letter of intent/interest from all co-sponsors must be included in the Appendices of the proposal.

Staff time, laboratory space, equipment, and most property can count as match funds if they are fully dedicated to the project for the time the property or equipment is required by the agreement, and if the value of the contribution is based on documented market values or book values and is depreciated or amortized over the term of the project using generally accepted accounting practices.

Property and equipment that do not qualify as match funds include such items as standard office supplies and property or equipment that is part of the applicant's normal business activity (desks, typewriters, telephones, computers, software, etc.).

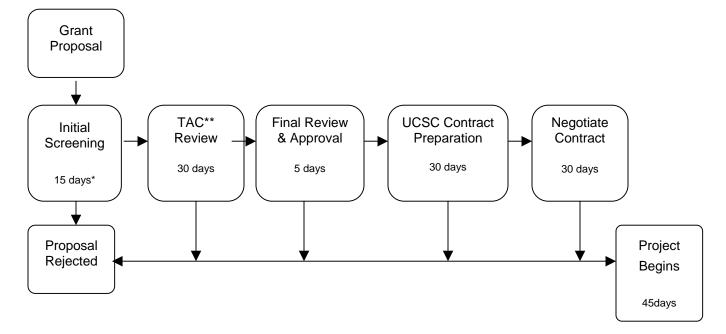
In all cases, the Commission reserves the right to review and approve or disapprove the crediting of contributions and the amounts of those contributions as match funding.

Proposed match funding must be spent concurrently with PIER Program funds, and only on the project elements described in the proposal. Match funds can be spent once a grant has been approved. However, PIER funds cannot be spent until the grant agreement is fully executed.

2. SELECTION PROCESS AND EVALUATION CRITERIA

2.1 Selection Process Time-Line

Grant applications will be processed as shown below:



^{*} All 'days' in above flow chart refer to 'working days' and represent the approximate time needed for each step.

Award offers may be withdrawn if contract negotiations surpass 30-day limit or if the awarded project is not begun within 45 days of contract finalization unless delay is seasonally or otherwise justified. Justification will be approved by SCPBRG at project kick-off meeting or before.

Note non-negotiable terms and conditions: Before submitting proposal, applicants are encouraged to speak with their contracts officers regarding non-negotiable terms and conditions that may impede reaching agreements. See Agreement (Appendix A) for potential problem areas. Approximate key dates for proposal process:

| Selection Process Step | Approximate start date | Approximate end date | |
|-------------------------------|--|----------------------|--|
| Request For Proposals | 5/25/04 | 7/24/04 | |
| Initial Screening | 7/26/04 | 8/13/04 | |
| Technical Review | 8/16/04 | 9/24/04 | |
| Final Review & Approval | 9/27/04 | 10/01/04 | |
| UCSC Contract Preparation | 10/04/04 | 11/12/04 | |
| Contract Negotiation | 11/15/04 | 12/24/04 | |
| Start Project | Projects may start as soon as contracts are finalized, and | | |
| | must be started by 2/25/04 (see details above) | | |

^{**} Technical Advisory Committee (see Section 2.3)

2.2 Initial Screening

All proposals will be initially screened for completeness and eligibility, and fundamental scientific feasibility. Proposals that fail any one of the following initial screening criteria will be rejected and will not be evaluated further under this solicitation. Proposals that pass all the screening criteria will proceed to the technical review process.

2.2.1 Completeness

A proposal must adhere to the grant application instructions listed in Section 3 and include all appropriate components as described in Section 3.3. A proposal must contain sufficient information to enable a useful evaluation to be conducted.

2.2.2 Eligibility

- The proposal must be submitted by an eligible applicant as described in Section 1.2.
- The proposed research must ultimately pursue the development and application of costeffective methods and technologies for reducing and/or resolving negative impacts from avian/bat interactions with utility structures.
- The project must meet **at least** one of the PIER goals, fit into one of the four research categories and meet one of the research needs outlined in Section 1.3.
- The proposal must contain a discussion that clearly identifies how the proposed work will advance science or technology in a way that is not adequately provided by the competitive and regulated markets.
- Proposal must not duplicate research listed in Research Restrictions, Section 1.4.

2.2.3 Feasibility

Proposals will be evaluated by whether a project appears to ask for an appropriate amount of funding to carry out the proposed research, whether the project can be completed within an appropriate timeframe, and whether the proposed project appears to comply with known scientific principles. Proposal should contain a sound explanation to justify any discrepancy that may arise here.

2.3 Technical Review Process and Criteria

All proposals that *pass* the initial screening will be further evaluated and scored for technical merit by a Technical Advisory Committee (TAC). Members of the panel have recognized expertise in the proposed subject area, and may be from academia, industry, government agencies, or non-profits.

Each reviewer will be required to sign conflict of interest and non-disclosure agreements. The identity of the review panel members will be kept confidential. All proposal evaluators and scorers will keep the contents of the proposals confidential.

2.3.1 Technical Review Scoring

Technical reviewers will score each proposal on the degree to which it meets the ten scaled and weighted technical criteria described below using the following as guidance:

| Raw Score | <u>Proposal Response</u> |
|-----------|---|
| 0 | Not responsive to the criterion |
| 1 | Response is minimally relevant to criterion |
| 2 | Responds satisfactorily to most relevant considerations under the criterion |
| 3 | Responds satisfactorily to all relevant considerations under the criterion |
| 4 | Response is complete, specific, and superior, both quantitatively and |
| | qualitatively |

Raw scores will be multiplied by the weighting factor for each criterion that reflects its relative importance. These Subtotals will be added to reach a total score.

Total Points Possible: 76

Minimum score required for eligibility: 45

2.3.2 Technical Review Criteria

1. Proportion of overall budget covered by outside funds.

The proposal identifies sources of match funds and cost-sharing arrangements, including cash and in-kind contributions.

A letter of support from the project cosponsor(s) is included.

2. Probability that proposed research is not likely to occur without CEC funding.

The proposal discusses the probability that proposed work will **not** occur without CEC funding and describes why proposed work is unique and/or crucial to the PIER-EA's goals listed in Section 1.3.

3. Proposed research addresses research needs with greater information gaps.

The proposal clearly identifies, describes, and quantifies (where possible) the knowledge gaps addressed by proposed research.

The proposal demonstrates how the filling of addressed gaps will advance efforts to reduce negative avian/bat interactions with power structures.

4. <u>PI and project team has demonstrated expertise and management capabilities</u> appropriate to execute proposed work.

The applicant describes in detail, with substantiation, his or her past and current work in the research subject area. Accomplishments (not just activities) are described.

The proposal demonstrates the applicant's awareness of current and prior work by others in the proposed research area.

The proposal convincingly demonstrates, based on education, training, and past experience, that the applicant and project team are capable of conducting all technical, administrative, and budgetary functions and responsibilities, including the ability to control cost, maintain the schedule, and report results and accomplishments in an effective manner.

If applicable, the PI has stated her/his holding of or eligibility for necessary permits.

5. <u>PI and project team's likelihood of completing project within stated budget and timeframe.</u>

The Work Statement reasonably appropriates time and budget with respect to the sequences of tasks, time allocated per task, and the use of labor, equipment, and facilities. If the research involves a particular environmental aspect – the schedule fits the necessary time of year to conduct the research.

The budget is appropriate considering: (1) the significance of the barriers, issues, and/or knowledge gaps being addressed, (2) the project's objectives and goals, and (3) the level of effort described in the Work Statement.

The budget shows that key personnel will be committed to the project for the appropriate number of hours and functions to accomplish the tasks and deliverables, and the activities described in the proposal.

6. Proposal identifies clear and measurable tasks and objectives.

The proposal:

Identifies the research category being targeted and the specific research need(s) being addressed from those listed in Section 1.3.

Demonstrates a clear, appropriate, and complete effort.

Presents a series of interconnected, logical, and discrete tasks and lays out an approach and plan that is practical and feasible for accomplishing the stated goals and objectives.

Specifies major milestones and deliverables and provides anticipated closing dates in terms of months from project initiation.

Explains the approach and methods to be employed; a description of what sources of information and data will be used and how this information will be evaluated; as well as any special tools, equipment, or facilities researchers propose to use to accomplish the project tasks.

Addresses how proprietary information needed to complete the project will be obtained.

Includes plans for resolving intellectual property concerns if applicable.

7. Proposed work is a continuation or expansion of current or prior study.

The proposed research builds on previous knowledge or furthers established technology.

The proposed work is part of an ongoing effort.

8. Solutions pursued are economically viable and likely to be implemented once developed.

The solutions sought appear to be practical, cost-effective, and consistent with both the PIER goal of reducing negative effects on the environment of energy production, delivery, and use and the PIER goal of providing quality, affordable electricity to California ratepayers.

9. <u>Proposal defines intentions to provide clearly identifiable benefits to California's</u> electricity ratepayers.

Proposal establishes a comprehensible relationship between proposed work and benefits to California's electricity ratepayers.

The public benefits derived by research built on the findings from the proposed project in addressing/resolving the energy-related environmental problem are significant.

10. <u>Proposal contains an appropriate (inexpensive and widely accessible) technology transfer plan.</u>

Applicant describes how results of proposed research will be shared in the form of journal publications, public media, interagency information sharing, or otherwise.

2.3.3 Final Review and Approval

Proposals receiving a score above the set <u>minimum acceptable score</u> will be compared and reviewed by the PIER-EA Programmatic Review Team. Lower scoring, small budget proposals may be approved over higher scoring, large budget proposals if funds have already been exhausted by even higher scoring proposals. SCPBRG will contact the PI of accepted proposals, and also announce the accepted proposals on SCPBRG and CEC web pages.

2.4 Rejected Proposals

PI's of proposals that will not be not funded will receive a rejection letter from the SCPBRG. An applicant may obtain a debriefing regarding a rejected proposal in the following two ways:

- 1. By contacting the SCPBRG to informally discuss the proposal.
- 2. By submitting a written (letter or email) list of questions or issues within 30 days of receiving the status letter on the proposal in question. The SCPBRG will respond to written inquiries in writing (letter or email) within 30 days.

All materials submitted in response to the Avian-Energy Systems Mitigation Grant Program solicitation become the property of the University of California for disposition purposes.

2.5 Modifications

To make a project acceptable, the SCPBRG retains the right to negotiate minor changes to a proposal's work statement and/or budget at any time during the evaluation, approval, and agreement execution process. Such modifications would be made to:

- Adjust the project scope to enhance feasibility;
- Adjust project budget;
- Avoid duplication of work;
- Reduce administrative requirements;
- Include tasks necessary for project success.

3. GRANT APPLICATION INSTRUCTIONS

3.1 General Instructions

The application package must be assembled in the order shown below. Requirements for each component are discussed in Sections 3.2 and 3.3; additional instructions for filling out the forms are provided with each form.

All electronically submitted documents should be in either Microsoft Word or PDF format.

- 1. Cover letter.
- 2. Grant Application Cover Page: use form provided
- 4. Main body of proposal: 6000 words (20 pages double spaced) excluding references.
- 5. Appendices: optional. 20 pages maximum.
- 6. Budget: use form provided and attach explanation page.
- 7. Key Personnel Résumés: A maximum of two pages per person. Required for the PI of each participating institution and all technical personnel who are critical to the project's success.

Provide all information necessary to adequately review the proposal, including all information requested in this Manual.

3.2 Formatting Requirements

Font size must be no smaller than 12 points. Single- or double-spaced is acceptable. Page numbers required.

If the proposal contains proprietary information, be sure to check the box on the Cover Page form, and clearly mark such sections in the application. The footer of each proprietary page or section must contain the words, "Contains proprietary information" and the appropriate text should be identified in an obvious manner. Applicants are encouraged to limit the proprietary information to only that which is necessary to adequately assess the technical merits of the proposed concept. Classifying an entire proposal as proprietary will result in the proposal being rejected.

SCPBRG, the Commission, and technical reviewers will employ appropriate procedures to safeguard proprietary or confidential information.

3.3 Content of Grant Application Package

- Cover letter: The cover letter must be from an institutional representative who is authorized to contractually commit the submitting organization to performing the proposed work; this must be the same individual listed on the Grant Application Cover Page. Packages and email submissions must identify the Principal Investigator and the title of the proposal, and should state the following: "The attached application constitutes [Institution Name]'s official submission of a proposal in response to SCPBRG-PIEREA Avian-Energy Systems Mitigation Program RFP."
- **Cover page**: Use the form in this Manual.
- Main Body of Proposal: The narrative should describe the project plan in detail. Essential supporting documents referenced in the narrative may be included as appendices. Keep in mind the review criteria given in Section 2.3.2 above. The project narrative must address the content items identified in the following recommended outline. Narratives that cite past research, trade publication articles, etc. must include a reference list. All acronyms should be spelled out in full when first cited.
 - 1. Project Benefits and Impacts: Describe how the project addresses the overall PIER Program objectives of developing cost effective approaches to evaluating and resolving environmental effects of energy production, delivery, and use in California and the specific goals of this program to develop and apply methods and technologies for reducing and resolving negative impacts from avian/bat interactions with utility structures.

- 2. Background and Problem Statement: Identify the specific research category(s) being targeted and the specific research need(s) being addressed (Section 1.3), the significance of each, and the general focus and scope of the proposed research. Describe the advancements expected, and the innovative and distinctive features of the proposed work.
- 3. Project Goals and Objectives: Describe overall and specific and measurable goals and objectives and how they relate to the PIER goals and research needs.
- 4. Scientific and Technological Baseline:
 - Summarize the current state of the art and status of the knowledge or technology to be improved by the proposed effort.
 - Identify and quantify the significance of barriers, issues, knowledge gaps, and scientific or technological deficiencies that the proposed project will address.
- 5. Approach: Discuss the proposed methodology, including underlying scientific and technical principles. Describe the distinctive and innovative features of the approach or discuss the merit of continuing to use previously established methods. The discussion should include a description of what sources of information and data will be used and how this information will be evaluated, as well as any special tools, equipment, or facilities researchers propose to use to accomplish the project tasks. Discuss any proprietary information needed to complete the project, and plans for obtaining such information.
- 6. Statement of Work: Provide a clear and detailed description of the tasks required to accomplish the work.
- 7. Milestones and Deliverables: Specify major milestones and deliverables; provide anticipated due dates in terms of months from project initiation and identify key personnel involved in reaching these milestones.

The Statement of Work and Milestones and Deliverables together must be a stand-alone section, as it will become part of contract language.

Note: Project PIs will be required to:

- a) Attend a project kick-off meeting.
- b) Submit a Study Plan before work begins, which the Programmatic Review Team will review. This Study Plan will list the Project's specific individual tasks and be accompanied by goals, methods, key personnel, deliverables, and a time-line for each.
- c) Prepare a two-page project summary, following a provided template, for posting on the CEC website at the onset of the project.

- d) Participate in at least one Critical Project Review per year (these may be conducted by phone).
- e) Submit quarterly written reports for all projects following format provided in contract.
- f) Prepare a Draft Final Report and a Final Report following format provided in contract. Ten copies of the final report will be accepted in print format along with one digital copy. The final report must include CEC-PIER and SCPBRG logos.
- g) Develop and submit a technology transfer plan to make the knowledge gained, experimental results and lessons learned available to key stakeholders.
- h) Participate in one formal and one informal Research Results Workshop. Final Reports will be published in Workshop Proceedings.
- 8. Team Qualifications and Project Resources: Briefly describe any relevant prior research by the team members; include references to relevant publications. If appropriate, include a discussion of related research currently being conducted or planned by the PI(s), and how it would complement work to be done under this solicitation. Identify any special facilities, equipment, tools, expertise, or other resources that will be made available to the project that will contribute to its success.
- 9. Cost-sharing (if applicable): Describe the sources of match funding and the cost-sharing arrangements, including cash and in-kind contributions. In-kind contributions include donated labor hours, equipment or facilities. A letter of support from the project cosponsor(s) must be included as an Appendix to the proposal. If the match funding comes from a related project, describe the related project in detail. Distinguish between the scope of work for this proposal and the scope of work for the related project.

Staff time, laboratory space, equipment, and most property can count as match funds.

- 10. Explain plans for resolving intellectual property concerns, if any.
- 11. Reference List: Narratives that cite past research, trade publication articles, etc. must include a reference list.
- Appendices: Maximum of 20 pages. Key supporting documents referenced in the
 narrative (such as photos, charts, drawings, blueprints, graphics, letters of support and
 excerpts from key articles) may be included. If project is being cost-shared, include a
 letter of interest/intent from the project cosponsors, specifying the planned level of costsharing or in-kind contribution.
- **Budget:** Use the format included.

• **Key Personnel Résumés:** A maximum of two pages per person. Required for the PI of each participating institution and all technical personnel who are critical to the project's success.

3.4 Submission

Electronic submission is preferred, using Microsoft Word or PDF format. However, you may mail the original and six full single-sided copies, including any supporting documents. For hardcopy submission postmark must be *five working days* prior to submission deadline date.

Address for electronic submission (PREFERRED): walton@ucsc.edu

Address for hardcopy submission (original plus 6 copies):

Attn: Brian James Walton/CEC Santa Cruz Predatory Bird Research Group Long Marine Lab University of California Santa Cruz, CA 95060 (831) 459-2466 fax (831) 459-3115

Please note: If you have not received a confirmation of receipt from SCPBRG that your application was received prior to the submission deadline, you must call to confirm that your application was received before the deadline. If an applicant claims to have submitted a proposal, but no confirmation notice was sent by SCPBRG, the proposal will not be accepted. Proposals sent to the California Energy Commission will not be accepted.

SCPBRG- PIEREA Avian Energy Systems Mitigation Program GRANT APPLICATION COVER PAGE

| onfidential Information. Clearly mark all such sections. |
|--|
| applies) |
| Compliance Monitoring |
| Technology Transfer |
| |
| Local/State/Federal agency |
| Small or Large Business Graduate student |
| Graduate student |
| |
| Authorized Contract Official |
| Name: |
| Title: |
| Dept: |
| Institution: |
| Address: |
| |
| Phone: |
| Fax: |
| E-mail: |
| Signature: |
| Date: |
| |
| |

^{*} See section 1.2

^{**} Only the PI will be contacted, and should contact SCPBRG to initiate any correspondence concerning the proposal and subsequent contract.

^{***}Note: By signing, individual applicants who are employed by or affiliated with an organization are certifying that (1) they have authorization from the organization to pursue this research as an individual, with no rights reserved to the organization, and (2) they are not employed by a college/university or affiliated laboratory.

SCPBRG- PIEREA

Avian-Energy Systems Mitigation Project Budget

| Project Title: | | | | | | |
|---------------------------------|----------|--------|--------|-----------------|-------|-------------------|
| Performing Institution: | | | | | | |
| Principal Investigator: | | _ | | | | |
| Length of Project: | | _ | _ | PIER | | TOTAL |
| | Effort | Rate | Cost | Program Cost | Share | PROJECT BUDGET |
| A. DIRECT LABOR | | | | Cost | | DODGET |
| PI: | | | | | | |
| | | | | | | |
| | | | | _ | | |
| | | | | _ | | |
| TOTAL Labor | | | | | | |
| | | | | | | |
| B. FRINGE BENEFITS | _ | _ | _ | | | |
| D 1 | | x Base | | | | |
| B.1 B.2 | | | | | | |
| B.3 | | | | _ | | |
| | | | | | | |
| TOTAL Fringe Benefits | | | | | | |
| C. TOTAL SALARIES (A+B) | | | | | | |
| D. SUBCONTRACTS and CONSU | JLTANTS* | | | | | |
| E. EQUIPMENT* | | | | | | |
| F. TRAVEL* | | | | | | |
| | G di | | | | | |
| G. MISCELLANEOUS EXPENSE G.1 | | | Amount | | | |
| G.2 | | | | - | | |
| | | | | | | |
| TOTAL Miscellaneous Expens | ses | | | | | |
| H. TOTAL DIRECT COSTS (C thr | ru G) | | | | | |
| I. INDIRECT COSTS | Rate | x Base | Cost | | | |
| i. INDIRECT COSTS | Rate | x Dase | Cost | | | |
| | | | | | | |
| TOTAL Indirect Costs | | | | | | |
| J. TOTAL COSTS (H+I) | | | | | | |
| J. 101AL CO313 (П+1) | | | | | | |

^{*} Explanations attached

BUDGET PREPARATION INSTRUCTIONS

Use the attached form to submit your budget. Attach an Explanation page to provide details of cost-sharing arrangements applying to individual budget items and to elaborate on items for which the following instructions specifically ask for an explanation.

A. Direct Labor:

Labor expenses incurred by the Awardee's personnel and team members during the term performance period of the grant agreement are allowable to the extent that the compensation is reasonable for each individual's skill level and experience and conforms to consistently-applied compensation policies of individual's organization.

Provide name and title of all senior research personnel; category of support personnel (e.g., technician, graduate student, administrative assistant).

Show effort level (e.g., work-months), rate, and cost for each individual. If both academic year and summer rates are used, show separately and identify as such (e.g., "Student, summer" and Student, acad. yr."). For pooled effort recharges, average pay rates are acceptable provided they are noted on the Explanation page.

B. Fringe Benefits:

Fringe benefits are allowable as a direct cost (if not included as an indirect cost) in proportion to the salary charged to the grant and provided the expense is based on formally established and consistently applied compensation policies of the individual's organization. If a student receives compensation for hours worked and tuition fees, show tuition as a separate line item. Applicants who apply as an "Individual" should not charge Fringe Benefits, and instead should show a fully loaded hourly rate.

C. Total salaries and wages (A + B).

D. Subcontracts and Consultants:

On Explanation page, give name of each subcontractor or consultant and provide a brief description of work, estimate level of effort (e.g., hours or days) and rate charged. Include curricula vitae for key personnel. For any subcontract or consultant fee totaling over \$10,000, attach a complete budget following the same format outlined here.

E. Equipment:

Equipment is defined as any item costing \$5000 or more and having a useful life of two years or more. Equipment purchases will be considered allowable as direct cost provided that (1) the item is necessary for completing the primary objectives of the grant research, and (2) renting or leasing the item at a lower cost is not an option.

All equipment purchased shall be made subject to the terms and conditions described in the Sample Agreement, Appendix A, item 9.

F. Travel:

Proposed travel must be related to the project, and costs must be reasonable. For travel to be reimbursed, it must occur within the performance period of the grant agreement. Travel expenses associated with final results workshops are also eligible for reimbursement.

For *each* anticipated trip, give specific information on destination, purpose of the trip, a brief justification explaining the benefits to the project associated with the trip, estimated air fare/transportation costs, lodging/per diem, and other related costs.

Reimbursements for travel will occur in accordance with the requirements listed in the Sample Agreement, Appendix A, item 21.

- G. Miscellaneous expenses: Includes office supplies, postage, telephone, departmental recharges, utilities, publications, and non-tangible procurements. On Explanation page justify any individual item costing \$1,000 or more.
- H. Total direct costs (C through G).

I. Indirect costs:

Not applicable for individuals, who should include appropriate overhead costs in their fully-loaded labor rate. Small businesses, non-profits, and academic institutions that choose to recover indirect costs may use an established rate based on the following priority, and must indicate on the Explanation page which rational they are using:

- 1. The rate used when doing similar research for the State of California or other state government.
- 2. The rate used when doing similar research for the Federal Government; or
- 3. The rate used and consistently applied to similar research contracts performed in the civilian sector.

If no indirect rate has been established, then a maximum indirect rate of 20% will be allowed on this grant. Excessive indirect rates that are deemed to adversely impact the quantity or quality of the research will be a consideration when scoring proposals.

On the Explanation page, indicate any exclusion from the indirect cost base (e.g., subcontracts, graduate student fee remission, equipment, facilities lease costs).

4. Grant Award Agreement

SCPBRG will send a notification letter the PI, once a proposal is approved for funding. The subcontracts office of UC and applicant's Contracts officer will then work together on executing a final agreement. The agreement must be signed by authorized representatives of both parties before work may begin or expenses reimbursed.

The UC subcontracts officer will base agreements on the Sample Agreement, Appendix A. All applicants should review the standard terms and conditions contained in the Sample Agreement prior to submitting proposal, and should be prepared to identify issues that need to be resolved in the event of an award. Failure to come to an agreement on the terms, conditions and requirements of the agreement within 30 days from receiving first draft of agreement from the UC, may be grounds to cancel the award (see section 2.1 for timeline).

4.1 Grant Performance

Once grant is approved for funding, the Awardee's personnel and any subawardees performing work under the award shall be responsible for exercising the degree of skill and care required by customarily accepted good professional practices and procedures used in the scientific research field. The SCPBRG project manager will approve the invoices based on grant performance and receipt of deliverables.

4.2 Reimbursement of Invoices

See Sample Agreement, Appendix A, for details. Funds are distributed for reimbursement of actual project expenses in arrears. Invoices for reimbursement should be submitted monthly or quarterly to the UC Research Resource Administrator. The SCPBRG Project Manager retains the right to withhold payment for reasons including but not limited to the following: (a) progress reports are not current; (b) the progress reports contain insufficient detail to assess Awardee's progress; (c) there is evidence of poor performance, or (d) billing is submitted that does not conform with the approved budget.

4.3 Deliverables

Awardee must submit all deliverables to the SCPBRG. The minimum required deliverables are:

- 1. Study Plan before work begins, which the Programmatic Review Team will review. This Study Plan will list the Project's specific individual tasks and be accompanied by goals, methods, key personnel, deliverables, and a time-line for each.
- 2. Two-page project summary, following a provided template, for posting on the CEC website at the onset of the project.
- 3. Submit quarterly written reports for all projects following format provided in contract.

- 4. Draft Final Report and a Final Report following format provided in contract. Ten copies of the final report will be accepted in print format along with one digital copy. The final report must include CEC-PIER and SCPBRG logos.
- 5. A technology transfer plan to make the knowledge gained, experimental results and lessons learned available to key stakeholders
- 6. Participate in one formal and one informal Research Results Workshop. Final Reports will be published in Workshop Proceedings.

Appendix A

Subcontract Number XXXXXX Between

The Regents of the University of California, Santa Cruz Campus and

XXXXXXXX

This Subcontract is between The Regents of the University of California, Santa Cruz Campus (hereinafter called "University") and XXXXXXXXX (hereinafter called the "Subcontractor").

Whereas, University has entered into a contract with the State Energy Resources Conservation and Development Commission (hereinafter called "Commission"); and

Whereas, the Commission is responsible for implementing the Public Interest Energy Research (PIER) Program; and

Whereas, Subcontractors proposal has been selected for conducting of research or other activities contributing to the Commission's mission and to the purposes of the prime contract;

NOW THEREFORE, the parties mutually agree as follows:

1. SCOPE OF WORK

The research to be provided under this Subcontract shall be in accordance with the following Attachment, which are attached and incorporated herein.

Attachment A: Statement of Work

2. PERIOD OF PERFORMANCE

The period of performance for this subcontract shall be from June 1, 2002 through XXXXXX.

3. SUBCONTRACT MANAGEMENT AND KEY PERSONNEL

A. Subcontract Principal Investigator and Key Personnel

XXXXX is designated as the Subcontractor Principal Investigator. The University/Commission reserves the right to approve any substitution of the individuals named in this paragraph. If there is a need to substitute key personnel, advance notice is required to the University Principal Investigator, who will submit the change to the Commission for their review and approval.

B. University Principal Investigator

Brian Walton is designated as the Principal Investigator who shall be responsible for the scientific conduct of the project covered this Subcontract.

C. University Administrator

Lynne VanDerKamp is designated as the University Administrator and has oversight responsibility for all of the administrative matters regarding this Subcontract.

D. University Subcontract Agreement Administrator Sue Kato Sinclair is designated as the University Subcontract Administrator and has oversight responsibility for all aspect of the Subcontract language.

4. BUDGET AND EXPENDITURES

The total amount of funds made available and reimbursable under this agreement shall not exceed \$XXXXX in accordance with the approved budget in Attachment B, Project Budget.

Subcontractor has the authority to reallocate \$5,000 or 15%, whichever is greater of the total amount of the approved budget. Any Deviations of more than 15% or \$5,000 will require written approval from the University Principal Investigator.

5. INVOICING AND PAYMENT

A. Payment shall be made monthly upon receipt from the Subcontractor, in triplicate, of a statement of the current month's expenditures in the following detail: salaries and wages, fringe benefits, consultants, supplies, equipment, travel, other direct costs. The itemized statement, referencing the subaward number and the University Principal Investigator, shall be sent to the following address:

Physical and Biological Sciences/Research Accounting University of California, Santa Cruz 301 Baskin Engineering Building Attn: Jane DeVette Santa Cruz, CA 95064-1077

All cost incurred under this Subcontract must be based on actual costs and are subject to audit. Substantiating documents (e.g., travel receipts, invoices, etc.) shall be retained and Subcontractor is expected to keep an accurate accounting of all costs incurred in the performance of this Subcontract.

B. The final invoice, clearly marked final, shall be submitted within sixty (60) days after the expiration of the period of performance indicted in Article 2 and shall include only those charges incurred during the referenced period of performance. If the final invoice cannot be submitted within the sixty (60) day period, the Subcontractor will notify the Physical and Biological Sciences/Research Accounting Office immediately, indicating the reason for the delay; otherwise funds will not be available to the Subcontractor due to the closeout of the Prime Agreement.

6. PRIME AGREEMENT TERMS AND CONDITIONS

The Award Notice for the Prime Agreement, including any and all Attachments, Exhibits, and any Amendments, Attachment C to this Subcontract, is incorporated herein and made a part of this Subcontract. This document will provide guidance for the administration of the Subcontract and in the event of any conflict between these documents and the Subcontract, the Subcontract shall take precedence.

7. CONFIDENTIAL PROVISIONS

All work products and other submittals under this subcontract shall be public documents, with the exception of work products whose potential existence could not reasonably have been foreseen at the time this subcontract was executed and for which the Public Records Act or other provision of law authorizes confidential treatment. Such additional unforeseen work products may be designated as confidential in accordance with the Commission's regulations.

8. STANDARD OF PERFORMANCE

- A. In performing work under this Subcontract, Subcontractor shall be responsible for exercising the degree of skill and care required by customarily accepted good professional practices and procedures used in scientific research.
- B. In the event that Subcontractor fails to perform in accordance with the foregoing standard of performance, the University Principal Investigator and the Commission Contract Manager shall seek to negotiate in good faith an equitable resolution satisfactory to both parties. If such a resolution cannot be reached, the parties shall work through the Commission's dispute resolution process described in Paragraph 13 herein, DISPUTES.

9. PURCHASE OF EQUIPMENT

- A. Equipment identified in Subcontractor's project proposal is approved for purchase.
 - B. In the event Commission contract funds are used to purchase equipment not identified in Subcontractor's proposal, the purchase of equipment in excess of \$5,000 shall be subject to prior written approval from the University's Principal Investigator.
 - C. All equipment purchased shall be made subject to the following terms and conditions:
 - 1. The Commission will prepare and the Subcontractor will complete and sign a Uniform Commercial Code (UCC.1) Financing Statement and submit it to the University Principal Investigator for complete processing. The University Principal Investigator will review the complete information and submit to the Commission Project Manager for their review and file the completed UCC.1 with the Secretary of State's Office for their processing.

Title to all non-expendable equipment purchased with Commission funds shall remain with the Commission.

Subcontractor shall assume all risk for maintenance, repair, destruction and damage to equipment while in the possession or subject to the control of Subcontractor.

- D. Upon termination of this contract, Commission may:
 - 1. Request that such equipment be returned to the Commission with any costs incurred for such return to be borne by Commission.

- 2. By mutual agreement with Subcontractor, allow Subcontractor to purchase such equipment for an amount not to exceed the residual value of the equipment as of the date of termination of this subcontract.
- 3. Transfer ownership of equipment to the Subcontractor to be used for non-commercial purposes.

10. INDEPENDENT CONTRACTOR

Subcontractor and its employees, consultants, agents, or independent contractors will perform all services under this Subcontract as independent contractors. Nothing in this Subcontract will be deemed to create an employer-employee or principal-agent relationship between University and Subcontractor's employees, consultants, agents or independent contractors. Subcontractor and its employees, consultants, agents and lower tier subcontractor will not, by virtue of any services provided under this Subcontract, be entitled to participate, as an employee or otherwise, in or under any employee benefit plan of University of any employment right or benefit available to or enjoyed by employees of University.

11.REPORT STANDARDS

- A. All progress reports will be submitted to the University Principal Investigator as mutually agreed.
- B. All reports shall be submitted to the University Principal Investigator in the format as described in Attachment D and D-1.
- C. All reports, including reprints, shall include the following legend:

LEGAL NOTICE

"This report was prepared as a result of work sponsored by the California Energy Commission (Commission). It does not necessarily represent the views of the Commission, its employees, or the State of California. The Commission, the State of California, its employees, contractors, and subcontractors make no warranty, express or implied, and assume no legal liability for the information in this report; nor does any part represent that the use of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Commission nor has the Commission passed upon the accuracy or adequacy of the information in this report."

12. RIGHTS OF PARTIES REGARDING INTELLECTUAL PROPERTY

A. Commission's Rights in Deliverables

Deliverables and reports specified for delivery to the Commission under this Subcontract shall become the property of the Commission. The Commission may use, publish, and reproduce the deliverables and reports subject to the provisions of Paragraph C.

- B. Rights in Technical, Generated, and Deliverable Data
 - 1. Subcontractor's Rights

Data (technical, generated and deliverable) produced under this Subcontract shall be the property of Subcontractor, limited by the license retained by the Commission in (2) below, and the rights the commission has in deliverables specified above in Subparagraph A.

2. Commission's Rights

Subcontractor shall provide the University and or Commission with a copy of all technical, generated and deliverable data procured under the Subcontract when requested.

Subcontractor is not required to copy and submit data that the Commission Contract Manager has identified as being unusable to the Commission and the PIER program.

For instance, some data may not warrant routine copying and shipping because this raw data is to disaggregated or voluminous for practical application. Retention of such data at Subcontractor's facility for inspection, review and possible copying by the Contract Manager is expected to be a more efficient use of Commission staff and Subcontractor's time and efforts.

For all data (technical, generated and deliverable) produced under this Subcontract, the Commission retains a no-cost, non-exclusive, non-transferable, irrevocable, royalty-free, worldwide, perpetual license to use, publish, translate, produce and to authorize others to produce, translate, publish and use the data, subject to the provisions of Paragraph C.

C. Limitations on Commission Disclosure of Subcontractor's Confidential Records

- 1. Data provided to the Commission by Subcontractor, which data the Commission has not already agreed to keep confidential and which Subcontractor seeks to have designated as confidential, or is the subject of a pending application of confidentiality, shall not be disclosed by the Commission except as provided in Title 20 CCR Sections 2506 and 2507 (or as they may be amended), unless disclosure is ordered by a Court of competent jurisdiction.
- 2. It is the Commission's intent to use and release project results such as deliverables and data in a manner calculated to further PIER while protecting proprietary or patentable interests of the parties. Therefore, the Commission agrees not to disclose confidential data or the contents of reports containing data considered by Subcontractor as confidential, without first providing a copy of the disclosure document for review and comment by Subcontractor. Subcontractor shall have no less than 10 working days for review and comment and, if appropriate, to make an application for confidentiality on some or all of the data. The Commission shall consider the comments of Subcontractor and use professional judgment in revising the report, information or data accordingly.

D. Exclusive Remedy

In the event the Commission intends to publish or has disclosed data that Subcontractor considers confidential, Subcontractor's exclusive remedy is a civil court action for injunctive relief. Such court action shall be filed in Sacramento County, Sacramento, California.

E. Waiver of Consequential Damages

In no event will the Energy Commission be liable for any special, incidental, or consequential damages based on breach of warranty, breach of contract, negligence, strict tort, or any other legal theory for the disclosure of Subcontractor's confidential records, even if the Energy Commission has been advised of the possibility of such damage. Damages that the Energy Commission will not be responsible for include, but are not limited to, loss of profit; loss of savings or revenue; loss of goodwill; loss of use of the product or any associated equipment; cost of capital; cost of any substitute equipment, facilities, or services; downtime; the claims of third parties including customers; and injury to property.

- F. Limitations on Subcontractor Disclosure of Subcontract Data, Information, Reports and Records
 - 1) Subcontractor will not disclose the contents of the final or any preliminary deliverable or report without first providing a copy of the disclosure document for review and comment to the Commission Contract Manager. Subcontractor shall consider the comments of the Commission Contract Manager and use professional judgment in revising the reports, information or data accordingly.
 - 2) After any document submitted has become a part of the public records of the State, Subcontractor may, if it wishes to do so at its own expense, publish or utilize the same, but shall include the legal notice as stated in Exhibit A of this Subcontract.
 - 3) Notwithstanding the foregoing, in the event any public statement is made by the Commission as to the role of Subcontractor or the content of any preliminary or Final Report of Subcontractor hereunder, Subcontractor may, if it believes such statement to be incorrect, state publicly what it believes is correct.
 - 4) No record that is provided by the Commission to Subcontractor for Subcontractor's use in executing this Subcontract and which has been designated as confidential, or is the subject of a pending Application for Confidential Designation, except as provided in Title 20, California Code of Regulations (CCR), sections 2506 and 2507, shall be disclosed, unless disclosure is ordered by a court of competent jurisdiction (Title 20 CCR, Sections 2501, et seq.). At the election of the Commission Contract Manager, Subcontractor, Subcontractor's employees and any subcontractor shall execute a "Confidentiality Agreement," supplied by the Commission Contract Manager.
 - 5) Subcontractor acknowledges that each of its officers, employees, and subcontractors who are involved in the performance of this Subcontract will be informed about the restrictions contained herein and to abide by the above terms.

G. Proprietary Data

Proprietary data owned by Subcontractor shall remain with Subcontractor throughout the term of this Subcontract and thereafter. The extent of Commission access to the same and the testimony available regarding the same shall be limited to that reasonably necessary to demonstrate, in a scientific manner to the satisfaction of scientific persons, the validity of any premise, postulate or conclusion referred to or expressed in any deliverable hereunder.

H. Preservation of Data

Any data which is reserved to Subcontractor by the express terms hereof, and preexisting proprietary or confidential data which has been utilized to support any premise, postulate or conclusion referred to or expressed in any deliverable hereunder, shall be preserved by Subcontractor at Subcontractor's own expense for a period of not less than three years after receipt by the Commission of the Final Report.

I. Destruction of Data

Before the expiration of three years and before changing the form of or destroying any such data, Subcontractor shall notify Commission of any such contemplated action and Commission may, within thirty (30) days after said notification, determine whether it desires said data to be further preserved. If Commission so elects, the expense of further preserving said data shall be paid for by the Commission. Subcontractor agrees that Commission may at its own expense, have reasonable access to said data throughout the time during which said data is preserved. Subcontractor agrees to use its best efforts to identify competent witnesses to testify in any court of law regarding said data or, at Commission's expense, to furnish such competent witnesses.

J. Patent Rights

- 1) Patent rights for any Subject Invention, whether actually patented or unpatented, will be the property of Subcontractor whose employees or researchers are inventors of such invention pursuant to U.S. patent law, subject to the Commission obtaining a no-cost, nonexclusive, nontransferable, irrevocable, perpetual, royalty-free, worldwide license to use or have practiced such rights for or on behalf of the State of California for governmental purposes. Commission shall not purposefully enter into competition with a Licensee or take affirmative actions intended to effectively destroy the commercial market where a Licensee has introduced a Licensed Product. Subcontractor must obtain agreements to effectuate this clause with all persons or entities, except for the U.S. Department of Energy (DOE), obtaining ownership interest in such patent rights. Previously documented (whether patented or unpatented under the patent laws of the United States of America or any foreign country) inventions are exempt from this provision.
- 2) Subcontractor will disclose to Commission on a confidential basis all Subject Inventions. The Commission may provide any suggestions to Subcontractor concerning commercialization strategies and/or potential licensees for such invention within sixty (60) days of receiving the disclosure from Subcontractor. Subcontractor shall send, by March 1 of each year, a report to University Administrator that provides non-proprietary information on the status of any patents and/or licensing agreements executed or under negotiation for Subject Inventions and/or activities by Licensee related to the development and testing of Licensed Product. University Administrator will forward this report to the Commission.
- 3) March-in Rights. With respect to any Subject Invention in which Subcontractor has acquired title, to the extent permissible under Federal laws and regulations, the Commission shall have the right to require Subcontractor, an assignee or Licensee of such patent rights to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant, upon terms that are reasonable under the

circumstances, and if Subcontractor, assignee, or Licensee refuses such request, to grant such a license itself, if the Commission determines that:

- a) such action is necessary because Subcontractor, Licensee, or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the patent rights in such field of use; or
- b) such action is necessary to alleviate health or safety needs that are not reasonably satisfied by Subcontractor, assignees, or their Licensees.

Final resolution, if not resolved under Paragraph 13 herein, DISPUTES, will be settled in the courts of the State of California. The parties may refer to the Federal Government's procedures for handling march-in rights.

4) Future Reductions. Subcontractor will submit in confidence within ninety (90) days after termination or expiration of this Subcontract, a report listing inventions that are conceived, but not actually reduced to practice, in the performance of this Subcontract. The Commission will identify in writing within sixty (60) days those conceptions that it desires to reserve rights to should Subcontractor desire to actually reduce to practice those identified conceptions within forty-two (42) months after the termination or expiration of the Subcontract. Subcontractor has an affirmative duty to report to the Commission those conceptions reduced to practice within the forty-two (42) month period.

K. Commission's Rights to Invention

Subcontractor and all persons and/or entities obtaining an ownership interest in Subject Invention(s) shall include within the specification of any United States patent application, and any patent issuing thereon covering a Subject Invention, the following statement:

This invention was made with State of California support under California Energy Commission contract number 500-01-032. The Energy Commission has certain rights to this invention.

L. Commission's Interest in Inventions

Upon the perfecting of a patent application on any Subject Invention, Subcontractor will fill out and sign a Uniform Commercial Code (UCC.1) Financing Statement and submit it the Commission Contract Officer for complete processing. The Commission Contract Officer will review the UCC.1 for complete information and file the completed UCC.1 with the Secretary of State's Office.

M. Copyrights

- 1. Copyrightable work first produced under this Subcontract shall be owned by Subcontractor, limited by the license granted to the Commission in (2) below.
- 2. Subcontractor agrees to grant the Commission a royalty-free, no-cost, nonexclusive, irrevocable, non-transferable, worldwide, perpetual license to produce, translate, publish, use and dispose of, and to authorize others to produce, translate, publish, use

and dispose of all copyrightable work first produced or composed in the performance of this Subcontract.

3. Subcontractor will apply copyright notices to all Deliverables using the following form or such other form as may be reasonably specified by Commission:

©[Year of first publication of deliverable], [copyright holder]. All Rights Reserved.

4. Software

In the event software that is not a deliverable is developed under the Subcontract, Subcontractor shall have the right to copyright and/or patent such software and grants the Commission a royalty-free, no-cost, non-exclusive, irrevocable, non-transferable, world-wide, perpetual license to produce and use for governmental purposes the software, and its derivatives and upgrades that may be developed by the authors within 42 months following the termination or expiration of this Subcontract. The Commission shall not purposefully enter into competition with a Licensee or take affirmative actions intended to effectively destroy the commercial market where a Licensee has introduced a licensed product.

N. Intellectual Property Indemnity

Subcontractor will defend and indemnify Commission from and against any claim, lawsuit or other proceeding, loss, cost, liability or expense (including court costs and reasonable fees of attorneys and other professionals) to the extent arising out of any third party claim solely arising out of the negligent or other tortious act(s) or omission(s) by Subcontractor, its employees, or agents, in connection with intellectual property claims against either deliverables or Subcontractor's performance thereof under this Subcontract.

O. University's Rights

Subcontractor acknowledges that University's obligations under the Commission prime contract contains certain responsibilities on behalf of the Sate of California and grants University a royalty-free, no-cost, nonexclusive, irrevocable, non-transferable, worldwide license to subcontractor-prepared Work under this Agreement for the sole purposes of fulfilling those responsibilities specified in the University's prime contract with the Commission. University acknowledges that University shall develop no rights in subcontractor-prepared intellectual property for any other purposes, including but not limited to University licensing of rights or other commercialization activity. Subcontractor and University agree that such discussion of mutual intellectual property management activity shall take place outside the context of the Agreement to the extent allowable under the terms of the prime contract with the Commission.

13. DISPUTES

In the event of a contract dispute or grievance between the Commission Contract Manager and Subcontractor, the following procedure shall be followed by both parties:

A. Commission Dispute Resolution

If a problem cannot be resolved within ten (10) working days between the Commission Contract Manager and the Subcontractor, Subcontractor shall prepare a package in writing stating the issues in the dispute, the legal authority or other basis for Subcontractor's position and the remedy sought. The package must be submitted to the Commission Dispute Resolution Committee. The Committee shall make a determination on the problem within ten (10) working days after receipt of the package. Should Subcontractor disagree with the Committee's decision, Subcontract may appeal to the full Commission at a regularly scheduled business meeting. The Committee will provide Subcontractor with the current procedures for placing the appeal on a Commission Business Meeting Agenda.

Subcontractor shall continue with the responsibilities under this Subcontract during any dispute.

B. Binding Arbitration

Should the Commission's Dispute Resolution procedure identified in Paragraph A above fail to resolve a contract dispute or grievance to the satisfaction of Subcontractor, Subcontractor may elect to have the dispute or grievance resolved through binding arbitration. The Commission may also elect to have any contract dispute or grievance resolved through binding arbitration. Both parties must agree to submit the dispute or grievance to arbitration. The arbitration proceeding shall take place in Sacramento County, California, and shall be governed by the commercial arbitration rules of the American Arbitration Association (AAA) in effect on the date the arbitration is initiated. The dispute or grievance shall be resolved by one (1) arbitrator who is an expert in the particular field of the dispute or grievance. The arbitrator shall be selected in accordance with the aforementioned commercial arbitration rules. The decision rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with the applicable law in any court having jurisdiction thereof. The demand for arbitration shall be made no later than six (6) months after the date of the contract's termination, irrespective of when the dispute or grievance arose, and irrespective of the applicable statute of limitations for a suit based on the dispute or grievance.

The cost of arbitration shall be borne by the parties as follows:

- 1) The AAA's administrative fees shall be borne equally by the parties;
- 2) The expense of a stenographer shall be borne by the party requesting a stenographic record;
- 3) Witness expenses for either side shall be paid by the party producing the witness;
- 4) Each party shall bear the cost of its own travel expenses;
- 5) All other expenses shall be borne equally by the parties, unless the arbitrator apportions or assesses the expenses otherwise as part of his or her award.

At the option of the parties, any or all of these arbitration costs may be deducted from any balance of Subcontract funds. Both parties must agree, in writing, to utilize Subcontract funds to pay for arbitration costs.

14. Business Activity Reporting

- A. Subcontractor shall give University prior written notice of any change of address or name change.
- B. Subcontractor shall not change or reorganize the type of business entity under which it does business except upon prior written notification to the University. A change of business entity or name change requi4res a contract amendment. In the event the University of no satisfied that the new entity can perform as the original Subcontractor, the University may terminate this subcontract as provided in the termination paragraph. (See also, Assignment.)
- C. Subcontractor shall promptly notify University of the occurrence of each of the following:
- 1. The existence of any litigation or other legal proceeding affecting the project;
- 2. The occurrence of any casualty or other loss to project personnel, equipment or third parties of a type commonly covered by insurance; and
- 3. Subcontractor's receipt of notice of any claim or potential claim against Subcontractor for patent, copyright, trademark, service mark and/or trade secret infringement that could affect the University's rights.

15. TERMINATION

A. Default

In the event of any default, the University may, without prejudice to any of its other legal remedies, terminate the prime contract upon five (5) days' written notice to Subcontractor. University shall immediately notify Subcontractor. In such event, University shall pay only the reasonable value of the satisfactory services theretofore rendered by Subcontractor, as may be agreed upon by the parties or determined by a court of law, but not in excess of Subcontract maximum payable.

B. For Cause

The University may, for cause, and at its option, terminate the Subcontract upon giving thirty (30)-days' advance written notice to Subcontractor. University shall immediately notify Subcontractor. In such event, Subcontractor agrees to use all reasonable efforts to mitigate its expenses and obligations. University will pay for services rendered and expenses incurred within the terms of the work statement and which were satisfactorily performed prior to such notice of termination which could not by reasonable efforts of Subcontractor have been avoided, but not in excess of Subcontract maximum payable.

The term "for cause" includes, but is not limited to, the following reasons:

Loss of State funding for this Subcontract;

significant change in State or Commission policy such that the work or product being funded would not be supported by the Commission;

reorganization or attempted assignment and delegation to a business entity unsatisfactory to the University/Commission;

change in University's staffing such that the work or product being funded can be done by staff of the University.

16. STOP WORK

The Commission Contract Manager may, at any time, by written notice to the UC and Commission Contract Officers, require University/Subcontractor to stop all or any part of the Subcontract work tasks.

A. Compliance

Upon receipt of such Stop Work order, Subcontractor shall immediately take all necessary steps to comply therewith and to minimize the incurrence of costs allocable to work stopped.

B. Equitable Adjustment

The Commission, based upon a written request for an equitable adjustment by University and Subcontractor, shall make an equitable adjustment. Such adjustment request must be made within thirty (30) days from the date of receipt by Subcontractor of the Stop Work notice.

C. Revoking a Stop Work Order

Subcontractor shall resume stopped work only upon receipt of written instructions from OP canceling the Stop Work order.

17. NOTICE

If, at any time during the performance of this Subcontract, the Subcontractor becomes aware of any circumstances whatsoever which may jeopardize its fulfillment of the agreed performance of all or any portion of the Subcontract, it shall immediately notify the University's Subcontract Administrator in writing of such circumstances, and the Subcontractor shall take whatever action is necessary to cure such defect within the shortest possible time.

18. RECORDKEEPING, COST ACCOUNTING AND AUDIT PROVISIONS

A. Fiscal Records

Subcontractor shall retain all records relating to direct and indirect expenses, including labor rates and time reports for all Subcontractor employees who worked on this Subcontract and for which the Commission is billed. Such records shall be maintained for a period of three years after final payment of this Subcontract, or until audited by the State, whichever occurs first, and shall be available for inspection or audit at any reasonable time by the Bureau of State Audits.

B. Cost Accounting

Subcontractor agrees to keep separate, complete, and correct accounting of the costs involved in developing, installing, constructing, and testing of project-related product(s) funded under this Subcontract as well as keep separate, complete, and correct account of the economic benefit(s) from project-related product(s) and right(s). The Commission shall have the right to examine Subcontractor's books of accounts at all reasonable times to the extent and as is necessary to verify the accuracy of Subcontractor's reports.

C. Accounting Procedures

The Subcontractor's cost shall be determined on the basis of Subcontractor's accounting system procedures and practices employed as of the effective date of this Subcontract; provided that the Subcontractor shall use generally accepted accounting principles and cost reimbursement practices. The Subcontractor's cost accounting practices used in accumulating and reporting costs during the performance of this Subcontract shall be consistent with the practices used in estimating costs for any proposal to which this Subcontract relates; provided that such practices are consistent with the other terms of this Subcontract and provided, further, that such costs may be accumulated and reported in greater detail during performance of this Subcontract. The Subcontractor's accounting system shall distinguish between direct costs and indirect costs. All costs incurred for the same purpose, in like circumstances, are either direct costs only or indirect costs only with respect to costs incurred under this Subcontract.

D. Allowability of Costs

1) Allowable Costs

The costs for which the Subcontractor shall be reimbursed under this Subcontract include all costs, direct and indirect, incurred in the performance of the work that are allowable in accordance with the provisions of the Budget. Costs must be incurred within the term of this Subcontract. Factors to be considered in determining whether an individual item of cost is allowable include (i) reasonableness of the item, (ii) allowcability of the item to the work, (iii) the Subcontractor's use of generally accepted accounting principles and cost reimbursement practices, and (iv) the other terms and conditions of this Subcontract.

2) Unallowable Costs

The following is a description of some specific items of cost that are unallowable; provided, however, that the fact that a particular item of cost is not included shall not mean that it is allowable.

- a) Contingency Costs, Imputed Costs, Fines and Penalties, Losses on Contracts, and Excess Profit Taxes are unallowable.
- b) The State of California is exempt from Federal excise taxes and no payment shall be made for any personal property taxes levied on Subcontractor, or on any taxes levied on employee wages. The Commission will only pay for any State or local sales or use taxes on the services rendered for equipment, parts or software supplied to the Commission pursuant to this Subcontract. Subcontractor will execute all such documents and take all such steps as are reasonably necessary to obtain the benefits of tax exemptions for which Commission is eligible. Taxes paid for which exemptions were available but not exercised, are not allowable items of cost.

E. Audit Rights

- 1) The Subcontractor shall maintain books, records, documents, and other evidence, based on the procedures set forth above, sufficient to reflect properly all costs claimed to have been incurred in performing this Subcontract. The Commission, a state agent of the Commission or, at the Commission's option, a public accounting firm designated by Commission, may audit such accounting records at all reasonable times with prior notice by Commission. Commission shall bear the expense of such audits. It is the intent of the parties that such audits shall ordinarily be performed not more frequently than once every twelve (12) months during the performance of the work and once at any time within three (3) years following payment by Commission of the Subcontractor's final invoice. However, performance of any such interim audits by Commission does not preclude further audit.
- 2) This Subcontract shall be subject to examination and audit by OP, the Commission, the Department of General Services, and the Bureau of State Audits, or their designated representative, for a period of three years after final payment under this Subcontract. Each shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Subcontract. Access to such records during normal business hours, and the right to interview any employee who might reasonably have information related to such records, shall be permitted.

F.Refund to Commission

If Commission determines, pursuant to Paragraph D or otherwise, that any invoiced and paid amounts exceed the actual allowable incurred costs, Subcontractor shall repay such amounts to Commission within thirty (30) days of request or as otherwise agreed by the Commission and OP. If such repayments are not received by Commission, Commission shall be entitled to withhold further payments to OP (for payment of this Subcontract to Subcontractor).

G. Audit Cost

The cost of a planned audit shall be borne by the Commission. If a planned audit results in a material finding, the Commission may determine that a special audit is required. The reasonable cost to the Commission of a special audit will be borne by the performing entity which is the subject of the special audit.

19. SITE ACCESS

The University, Energy Commission staff or its representatives shall have reasonable access to the construction site or R&D laboratory, and all project records.

20. INDEMNIFICATION

A. Subcontractor shall defend, indemnify, and hold The University, its officers, employees, and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Subcontract but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from

the negligent or intentional acts or omissions of Subcontractor, its officers, agents, or employees.

B. The University shall defend, indemnify, and hold Subcontractor, its officers, employees, and agents harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Subcontract but only in proportion to and to the extent such liability, loss, expense, attorneys' fees or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of The Regents, its officers, agents or employees.

21. TRAVEL AND PER DIEM

- A. Subcontractor shall be reimbursed for travel and per diem in accordance with the Subcontractor's approved rates for its employees. Subcontractor shall provide a copy of the current approved rates to University and the Commission upon request. Travel expenses in excess of the Subcontractor's established rates cannot be reimbursed. Travel expenses shall be paid from the location where the employees assigned to the Subcontract are permanently located.
- B. Subcontractor must document travel expenses as follows:
 - 1) Expenses must be detailed using Subcontractor's currently established and approved rates.
 - 2) Expenses must be listed by trip including dates and times of departure and return.
 - 3) Subcontractor must retain receipts for travel expenses claimed for audit and verification.

22. SURVIVAL

It is understood and agreed that certain subcontract provisions shall survive the completion or termination date of this contract for any reason. The subcontract provisions include, but are not limited to:

- "Payments"
- "Standard of Performance"
- "Purchase of Equipment"
- "Rights of Parties Regarding Intellectual"
- "Site Access"
- "Disputes"
- "Business Activity Reporting"
- "Termination"
- "Recordkeeping, Cost Accounting and Auditing"
- "Payments to Commission"
- "Indemnification"

23. PAYMENTS TO COMMISSION

A. In consideration of the University/Commission providing funding, Subcontractor agrees to pay the Commission a portion of either Net Revenues or Net Royalties under the terms and conditions hereinafter set forth.

- B. Net Royalties. If Subcontractor licenses to a Licensee, Subcontractor's obligation to make payments to the Commission shall commence from the date that the Net Royalties calculation is positive. Payments are payable in annual installments and are due the first day of March for Net Royalties calculation made for Subcontractor's prior fiscal year. Subcontractor agrees to pay to Commission an amount equivalent to 10% of the total cumulative Net Royalties for itself and all its subcontractors, less payments made by Subcontractor to the Commission in previous years when Net Royalties for Subcontractor were positive. Payments shall be made by check, made payable to the California Energy Commission, PIER Fund.
- C. Net Revenues. If Subcontractor is the Licensee, Subcontractor's obligation to make payments to the Commission shall commence upon the first sale of the Licensed Product. Payments are payable in annual installments and are due the first day of March for the prior fiscal year of Subcontractor. Subcontractor agrees to pay an amount equivalent to 1.5% of the Net Revenues by check made payable to the California Energy Commission, PIER Fund.
- D. Subcontractor agrees to and shall require each subcontractor to agree not to make any sale, license, lease, gift or other transfer of any Subject Invention, Copyrightable Work or Project-Related Products (PRP) with the intent of, or for the purpose of, depriving Commission of Net Royalties or Net Revenues hereunder. Generally, this means that Subcontractor will not make any sale, license, lease or other transfer of PRP for consideration other than fair market value except for research, educational, or other mutually agreed to purposes intended to serve the public benefit.
- E. Subcontractor shall maintain separate accounts within their financial and other records for purposes of tracking royalties and revenues due to the Commission under this Subcontract.
- F.Audits on Payments to Commission. Payments to the Commission are subject to audit as provided for under Article 15, Recordkeeping, Cost Accounting, and Audit Provisions.
- G. Defaults. In the event of default hereunder, the Commission shall be free to exercise all rights and remedies available to it herein, and under law and at equity. The occurrence of any of the following events or conditions shall constitute a default under this Subcontract:
- (1) Subcontractor's failure to pay when due, any amount due and payable under the terms of this Subcontract.
- H. Subcontractor acknowledges that a late payment of royalties/revenues owed to the Commission will cause the Commission to incur costs not contemplated by the parties. If a royalty/revenue payment is not paid when due, Subcontractor agrees to pay the Commission a late fee equal to two percent (2%) of the payment due. Additionally, Subcontractor agrees that royalty/revenue payments not paid within fifteen (15) days of the due date shall thereupon become debt obligations of Subcontractor to the Commission, due upon demand and bearing interest at the maximum interest rate allowed by law.
- I. The parties agree that Subcontractor does not guarantee compliance with payments under this Paragraph in the event of default by a subcontractor to Subcontractor. Amounts in default and not paid by Subcontractor's subcontractor will not be paid by Subcontractor under Paragraphs B and C, and the fees and obligations of Paragraph H pursuant to such

default and non-payment shall not be a responsibility of Subcontractor. However, Subcontractor has an affirmative duty to monitor its subcontractors' compliance and take reasonable enforcement measures calculated to obtain its subcontractors' performance of the payment obligations of this Paragraph.

24. GENERAL TERMS AND CONDITIONS

A. Assignment

This subcontract is not assignable by the Subcontractor, either in whole or in part, without the consent of the University in the form of a formal written amendment. Such consent shall not be unreasonably withheld.

B. Waiver

No waiver of any breach of this contract shall be held to be a waiver of any other or subsequent breach. All remedies afforded in this contract shall be taken and construed as cumulative, that is, in addition to every other remedy provided therein or by law. The failure of Commission to enforce at any time any of the provisions of this subcontract, or to require at any time performance by Subcontractor of any of the provisions therefore, shall in no way be construed to be a waiver of such provisions, nor in any way affect the validity of this subcontract or any part thereof or the right of Commission to thereafter enforce each and every such provision.

C. Severability

If any provision of this subcontract or the application thereof is held invalid, that invalidity shall not affect other provisions of the subcontract.

25. SUBCONTRACTOR DUTIES, OBLIGATIONS AND RIGHTS

The Subcontractor under the performance of this contract has been fully informed of its duties, obligations, and rights under Public Contract Code, Sections 10355 through 10382, and any additional Subcontractor's rights and obligations which should be included. A copy of the applicable sections of the Public Contract Code shall be provided to the Subcontractor upon request.

26. PRIOR DEALINGS, CUSTOM OR TRADE USAGE

In no even shall any course of dealing, custom or trade usage modify, alter, or supplement any of the terms or provision contained herein.

27. USE OF NAME

Use of the California Institute for Energy Efficiency name in publications, news releases, advertising, speeches, technical papers, photographs and other releases of information regarding this undertaking or data developed hereunder may not be made except upon prior written approval from the CIEE, or except

for purposes of support acknowledgement. In any written release of information, the Subcontractor shall use the standard disclaimer given in Exhibit A – Scope of Work.

28. FORCED, CONVICT, AND INDENTURED LABOR

- A. By accepting this agreement, the Subawardee hereby certifies that no foreign-made equipment, materials, or supplies furnished to the University pursuant to this order will be produced in whole or in part by forced labor, convict labor, or indentured labor under penal sanction.
- B. The Subawardee, contracting with the University, who knew or should have known that the foreign-made equipment, materials, or supplies furnished to the University were produced in whole or in part by forced labor, convict labor, or indentured labor under penal sanction, when entering into an agreement pursuant to the above, may have any or all of the following sanctions imposed:

XXXXXXXXXXXXX

- C. The agreement under which the prohibited equipment, materials, or supplies were provided may be voided at the option of the University.
- D. The Subawardee may be removed from consideration for University agreements/contracts for a period not to exceed 360 days.

IN WITNESS WHEREOF, the parties have executed this Agreement in two or more counterparts each as an original and all together as one instrument as of the date of last signature below written.

| OF CALIFORNIA | | | |
|-------------------------|-------------|--------|-------------|
| Name: | Name: | | |
| Sue K. Sinclair | | | |
| Title: Sr. Research Adn | ninistrator | Title: | |

Date:

THE REGENTS OF THE UNIVERSITY

Date: XXXXXXXXX